

Amendments to the Specification:

Please replace the paragraph beginning at page 1, line 6, with the following amended rewritten paragraph:

The subject matter of this application relates to the subject matter of ~~copending~~ Hu U.S. Patent 6,316,354, issued November 13, 2001 Application Serial No. 09/428,344, entitled "PROCESS FOR REMOVING RESIST MASK OF INTEGRATED CIRCUIT STRUCTURE WHICH MITIGATES DAMAGE TO UNDERLYING LOW DIELECTRIC CONSTANT SILICON OXIDE DIELECTRIC LAYER", assigned to the assignee of this application, and ~~filed on~~ October 26, 1999, the subject matter of which is hereby incorporated by reference.

Please replace the paragraph beginning at page 1, line 12, with the following amended paragraph:

The subject matter of this application also relates to the subject matter of copending Gu et al. U.S. Patent Application Serial No. 6,562,700, issued May 13, 2003 09/873,043, entitled "PROCESS FOR REMOVAL OF RESIST MASK OVER LOW K CARBON-DOPED SILICON OXIDE DIELECTRIC MATERIAL OF AN INTEGRATED CIRCUIT STRUCTURE, AND REMOVAL OF RESIDUES FROM VIA ETCH AND RESIST MASK REMOVAL", assigned to the assignee of this application, and ~~filed on~~ May 31, 2001, the subject matter of which is hereby incorporated by reference.

Please replace the paragraph beginning at page 5, line 3, with the following amended paragraph:

Previously cited U.S. Patent 6,316,354 Application Serial No. ~~09/428,344~~, discloses a process for removing resist mask material from a protective barrier layer formed over a layer of low k carbon-doped silicon oxide dielectric material of an integrated circuit structure without damaging the low k dielectric material, and without the necessity of subjecting the exposed via sidewalls of the low k dielectric material to either a pretreatment to inhibit subsequent damage to the low k dielectric material during the resist removal, or a post treatment to repair damage to the low k material after the resist removal. The resist removal process comprises exposing the resist mask material to a hydrogen plasma formed from a source of hydrogen such as ammonia, while maintaining the temperature below about 40°C to inhibit attack of the low k silicon oxide dielectric material by oxygen released from the decomposition of the resist material.

Please replace the paragraph beginning at page 5, line 14, with the following amended paragraph:

Previously cited U.S. Patent 6,562,700 Application Serial No. 09/873,043, describes a process for removing a photoresist mask used to form openings in an underlying layer of low k carbon-doped silicon oxide dielectric material of an integrated circuit structure formed on a semiconductor substrate, by exposing the photoresist mask in a plasma reactor to a plasma formed using a reducing gas until the photoresist mask is removed. In a preferred embodiment the reducing gas is selected from the group consisting of NH₃, H₂, and a mixture of NH₃ and H₂. The low k carbon-doped silicon oxide dielectric material is then treated with a solvent capable of dissolving etch residues left from forming the openings in the low k dielectric material, and from removing the photoresist mask used to form the openings in the low k carbon-doped silicon oxide dielectric material. The low k carbon-doped silicon oxide dielectric material is then annealed in an annealing chamber at a temperature sufficient to remove liquid and gaseous byproducts from the low k carbon-doped silicon oxide dielectric material.

Please replace the paragraph beginning at page 5, line 26, with the following amended paragraph:

While the substitution of a milder oxidation process using an H₂O plasma, as proposed by Sukharev et al. U.S. Patent 6,114,259, or the substitution of the reducing processes respectively proposed by Hu U.S. Patent 6,316,354 ~~Application Serial No. 09/428,344~~ and Gu et al. U.S. Patent 6,562,700, ~~Application Serial No. 09/873,043~~, constitute improvements over the conventional oxidation or ashing process, it has been found that the problem of via poisoning still is experienced at a higher than desirable rate.

Please replace the paragraph beginning at page 8, line 14, with the following amended paragraph:

The low k carbon-doped silicon oxide dielectric material referred to herein comprises the reaction product of an organo-substituted silane and an oxidizing agent. Examples of organo-substituted silanes include the methyl silane referred to in the previously cited Peters and McClatchie et al. articles. The organo-substituted silane may also comprise a multiple carbon-substituted silane such as described in U.S. Patent 6,303,047, issued October 16, 2001, ~~pending application Serial No. 09/274,457, filed March 22, 1999~~ and assigned to the assignee of this invention, the subject matter of which is hereby incorporated by reference. The organo-substituted silane may also comprise an organofluoro silane such as described in U.S. Patent 6,365,528, issued April 2, 2002 ~~Serial No. 09/590,310, filed on June 7, 2000~~; and in U.S. Patent 6,572,925, issued June 3, 2003 and Serial Nos. ~~09/792,683; 09/792,685; and 09/792,691; all 09/792,685 and 09/792,691~~. All of the latter three of the preceding cases were filed on February 23, 2001. All four of these cases ~~applications~~ are assigned to the assignee of this application, and the subject matter of all four cases ~~applications~~ is hereby incorporated by reference.